

October 26, 2004

Mr. George Dorn South Carolina Public Service Commission ATTN: Docketing Department P. O. Drawer 11649 Columbia, SC 29211

RE:

Progress Energy Carolinas, Inc.'s Petition to Revise

Its Nuclear Depreciation Expense Rates

Docket No. 2004- -E

Dear Dorn:

Enclosed for filing with the Commission are an original and ten (10) copies of revisions to the depreciation expense study for Progress Energy Carolinas, Inc. ("PEC"), filed with the North Carolina Utilities Commission ("NCUC") on March 9, 2004. These revisions relate solely to PEC's three nuclear plants. PEC is extending the depreciable lives of its Harris and Brunswick plants by 20 years and its Robinson plant by 5 years. The result of these revisions is a reduction of PEC's annual system depreciation expense of approximately \$47 million.

Very truly yours,

Len S. Anthony

Deputy General Counsel-Regulatory Affairs

LSA:mhm

Attachment

#### **BEFORE**

#### THE PUBLIC SERVICE COMMISSION OF

#### SOUTH CAROLINA

#### DOCKET NO. 2004, -E

In the Matter of

)	PROGRESS ENERGY CAROLINAS,
)	INC.'S PETITION TO REVISE ITS
)	NUCLEAR DEPRECIATION EXPENSE
)	RATES
	) ) )

Pursuant to Rules 103-830 and 103-836 of the Public Service Commission of South Carolina ("The Commission") and S.C. Code Ann. §§ 58-3-140, 58-27-140, 58-27-230, and 58-27-1550, Progress Energy Carolinas, Inc. ("PEC") petitions the Commission for an accounting order allowing it to adopt revised nuclear depreciation expense rates effective January 1, 2004. In support of its petition, PEC shows the following.

1) The correct name and legal address of the petitioner is:

Progress Energy Carolinas, Inc. 410 South Wilmington Street Raleigh, NC 27601

2) The attorneys for PEC to whom all correspondence should be directed are:

Len S. Anthony Kendal C. Bowman Progress Energy Service Company, LLC 410 South Wilmington Street (PEB 17A4) Raleigh, NC 27601

1

- 3) PEC is an electric utility organized, existing and operating under the laws of the State of North Carolina, and authorized to do business in South Carolina, for the purposes of generating, transmitting and distributing electric power in its service territories in North and South Carolina.
- 4) On March 9, 2004, PEC filed with the Commission its Petition to Adopt New Depreciation Expense Rates effective January 1, 2004. The Commission voted to approve the new rates on March 23, 2004.
- 5) A significant factor in the depreciation rates filed March 9, 2004, was the anticipated extension of the Robinson Unit No. 2 nuclear operating license which would extend the allowed operational life of the plant by twenty (20) years. PEC conservatively calculated its new depreciation rates for the Robinson Nuclear Plant based on a fifteen (15) year extended operating life. Since that time PEC has decided to: a) file with the Nuclear Regulatory Commission requests to extend the nuclear licenses of its two other nuclear plants, the Harris and Brunswick Nuclear Plants, by twenty (20) years; b) extend the depreciable lives of these plants by an additional twenty (20) years and adjust their depreciation rates accordingly on the basis that it is reasonably probable PEC's nuclear license extension requests will be granted; and c) revise the depreciable life of the Robinson Nuclear Plant by the full twenty (20) years of the license life extension, rather than the fifteen (15) years used in PEC's March 9, 2004 filing, because it is reasonably probable that the plant will operate the entire period of the license extension. PEC requests the Commission issue an accounting order allowing it to implement the new depreciation expense rates as reflected in the attached study effective January 1, 2004. All changes from the depreciation study filed March 9, 2004 are attached as Exhibit 1.

<sup>&</sup>lt;sup>1</sup> The Nuclear Regulatory Commission has now granted PEC the license extension.

The annual impact of this revision is a decrease in PEC's annual depreciation expense of \$46,812, 248.

6) Adoption and implementation of the new depreciation rates will not involve a change to any of PEC's rates or prices, or any Commission rule, regulation or policy. In addition, issuance of the accounting order does not prejudice any party's right to address this issue in a subsequent general rate case proceeding. PEC respectfully requests that the accounting order be made effective as of January 1, 2004.

WHEREFORE, PEC requests the Commission issue an accounting order allowing it to adopt and implement the new depreciation rates as described above.

3

Respectfully submitted this 26<sup>th</sup> day of October, 2004.

Zen S. Anthony

Kendal C. Bowman Post Office Box 1551

Raleigh, North Carolina 27602-1551

Telephone: (919) 546-6367

#### EXHIBIT 1

## BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

DOCKET NUMBER 2004-\_\_\_-E

### PROGRESS ENERGY CAROLINAS, INC NUCLEAR GENERATION PLANT

DEPRECIATION STUDY AS OF DECEMBER 31, 2002

#### October 1, 2004

Mr. Andrew Krebs
Manager of Property and Materials Accounting
Progress Energy Carolinas, Inc
Mail Code: PEB 18-A4
P.O. Box 1551
410 South Wilmington Street
Raleigh, NC 27602

RE: Nuclear Generation Depr. Study

Dear Mr. Krebs:

In accordance with your authorization, we have prepared a depreciation study related to the Nuclear Generation utility plant in service of Progress Energy Carolinas, Inc. as of December 31, 2002. Our findings and recommendations, together with supporting schedules and exhibits, are set forth in the accompanying report. This report updates the report sent to you on March 5, 2004. In the attached information, successful life extension has been utilized for all nuclear units.

Summary schedules have been prepared to illustrate the impact of instituting the recommended annual depreciation rates as a basis for the Company's annual depreciation expense as compared to the rates presently utilized. The application of the present rates to the Nuclear Generation depreciable plant in service as of December 31, 2002 results in an annual depreciation expense of \$105,277,844. In comparison, the application of the proposed depreciation rates to the Nuclear Generation depreciable plant in service at December 31, 2002 results in an annual depreciation expense of \$58,465,596, which is a decrease of \$46,812,248 from current rates. The composite annual depreciation rate under present rates is 2.24 percent, while the proposed pro forma composite depreciation rate is 1.25 percent.

Section 2 of our report contains the summary schedules showing the results of our service life and salvage studies and summaries of presently utilized depreciation rates. The subsequent sections of the report present updated information reflecting life extensions. A detailed table of contents follows this letter.

Respectfully submitted.

EARL M. ROBINSON, CDP

#### **TABLE OF CONTENTS**

		Page <u>No.</u>
<u>SECTIO</u>	<u>N 1</u>	
Exc	ecutive Summary	1-1
SECTIO	<u>DN 2</u>	
Pla	Immary of Original Cost of Utility Plant in Service of Nuclear Generation ant as of December 31, 2002 and Related Annual Depreciation Expenses or Present and Proposed Depreciation Rates (Table 1 - FERC ACCOUNT)	2-1
Pla De	Immary of Original Cost of Utility Plant in Service of Nuclear Generation ant (By Location) as of December 31, 2002 and Related Annual epreciation Expenses Under Present and Proposed Depreciation Rates able 1 - Plant Site)	2-3
an Up	Immary of Original Cost of Utility Plant in Service of Nuclear Generation Plant of Calculation of Annual Depreciation Rates and Depreciation Expense Based on Utilization of book Depreciation Reserve and Average Remaining Lives of illity Plant in Service as of December 31, 2002 (Table 2)	1
an Up of	ummary of Original Cost of Utility Plant in Service of Nuclear Generation Plant of Calculation of Annual Depreciation Rates and Depreciation Expense Based on Utilization of book Depreciation Reserve and Average Remaining Lives Utility Plant in Service By Individual Plant Location as of ecember 31, 2002 (Table 2-Loc)	t d 2-6
SECTIO	<u>N 4</u>	
St	tudy Results	4-1
SECTIO	N 6	
Co	omposite Remaining Life Calculations	6-1

Note: This update required no change to Sections 3, 5, 7, and 8, as filed on March 9, 2004 in Docket No. 2004-71-E.

#### PROGRESS ENERGY CAROLINAS, INC Nuclear Generation Plant

#### Executive Summary

Table 1 - FERC ACCOUNT on pages 2-1 and 2-2 is a comparative summary which illustrates the effect of instituting the revised depreciation rates. The schedule includes a comparison of the annual depreciation rates and annual depreciation expense under both present and proposed rates applied using the Straight Line Method for each depreciable property group of the Progress Energy Carolinas, Inc ("Company") plant in service as of December 31, 2002. Both the present and proposed depreciation rates were developed utilizing the Straight Line (SL) Method, Broad Group (BG) Procedure, and the Average Remaining Life (ARL) Technique.

Table1 - Plant Site on pages 2-3 and 2-4 is a summary of present and proposed depreciation rates, relative to the Company's Nuclear Plant Accounts and is summarized by each individual plant site and property group account. Both Table 1-FERC ACCOUNT and Table 1 - Plant Site provide the proposed depreciation rates segmented by plant only, gross salvage and cost of removal recovery components.

Table 2 on page 2-5 provides a summary of the detailed life estimates and service life parameters (Iowa Curves) utilized in preparing the Average Remaining Life depreciation rates for each property group. The developed depreciation rates (Column L) were determined by studying the Company's historical investment data together with the interpretation of future life expectancies which will have a bearing on the overall service life of the Company's property.

Table 2-Location on pages 2-6 and 2-7 is a summary of the depreciation rate

development for the Company's Nuclear Production plant accounts detailed by account and plant locations.

The utilization of the recommended depreciation rates based upon the Straight Line Average Remaining Life Procedure results in the setting of depreciation rates which will continuously true up the Company's level of capital recovery over the life of each asset group. Application of this procedure, which is based upon the current best estimates of service life together with the Company's plant in service and accrued depreciation, produces annual depreciation rates that will result in the Company recovering 100 percent of its investment — no more, no less.

It is recommended that the Company continue to apply depreciation rates and maintain its book depreciation reserve on an account-level basis. The maintenance of the book reserve on an account-level basis requires both the development of annual depreciation expense and distribution of other reserve account charges to an individual account level. Maintaining the Company's depreciation records in this detail will aid in completing the various rate studies and, most importantly, clearly identifies the Company's level of capital recovery relative to each category of plant investment.

The general drivers for the proposed depreciation rates include an assessment of the Company's historical experience with regard to achieved service lives and net salvage factors. In addition, consideration is given to current and anticipated events which are anticipated to impact the Company's ability to recover its fixed capital costs related to utility plant in service utilized to provide service to the Company's customers.

The depreciation rate for each individual account changed as a result of reflecting estimates obtained through the in-depth analysis of the Company's most recent data

together with an interpretation of ongoing and anticipated future events.

The most notable depreciation/amortization occurred relative to Account 321 - Structures and Improvements, Account 322 - Reactor Plant Equipment, and Account 323 - Turbogenerator Units. All changes were due to life extension assumptions.

Applying the proposed depreciation to the Company's December 31, 2002 Nuclear Generation plant in service produces annual depreciation expense of \$58,465,596 which is a decrease of \$46,812,248 from current depreciation rates.

The following summary compares the present and proposed composite depreciation rates for illustrative purposes only. The <u>Composite Depreciation Rate</u> should not be applied to the total Company investment inasmuch as the non-proportional change in plant investment as a result of property additions or retirements would render the composite rate inappropriate. The Table 1 schedule lists the recommended annual depreciation rates for each property account.

#### Present Depreciation Rates

Depreciable Nuclear Generation Plant In Service at December 31, 2002	\$4,691,537,400
Annual Depreciation Expense	105,277,844
Composite Annual Depreciation Rate	2.24%

#### **Proposed Depreciation Rates**

Depreciable Nuclear Generation Plant In Service at December 31, 2002	\$4,691,537,400
Annual Depreciation Expense	58,465,596
Composite Annual Depreciation Rate	1.25%

Progress Energy Carolinas, Inc

Summary or Original Cost of Nuclear Generation Utility Plant in Service as of December 31, 2002 and Related Annual Depreciation Expense Under Present and Proposed Rates
(By FERC Account)

								Proposed Rates	Rates					
Account		Original	Pres	Present Rates	Proposed PI	Proposed Plant Only Rates	Proposed Gro	Gross Salv Rates	Proposed COR Rates	OR Rates	Total Proposed Rates	sed Rates	Net	
No.	Description	12/31/02	Rate %	Accrual	Rate %	Accrual	Rate %	Annual	Rate %	Accrual	Rate %	Accrual	Change Denr Fyn	
(a)	(q)	9	<u>©</u>	9	E	(6)	(E)	€	5	3	(3)	(E)	(u)	
	DEPRECIABLE PLANT													
320.02	Nuclear Production Plant													
	Brunswick Nuclear #1LR	7,532	0.64%	87	0.64%	48	0.00%	0	0.00%	0	0.64%	84	0	
	Brunswick Nuclear #2 LR Harris Nuclear #1 i D	51,363	0.26%	134	0.26%	134	0.00%	0	0.00%	0	0.26%	<del>1</del> 3	0	
	Robinson Nuclear #2LR	39,144	0.34%	133	0.34%	415,110 133	%00.0 0.00%	00	%00.0 %00.0	0 0	1.50%	611,314	00	
	TOTAL Account 320	40,852,313	1.50%	611,629	1.50%	611,629	0.00%	• •	0.00%	, 0	1.50%	611.629	<b>,</b>	
321.00	Structures and Improvements												•	
	Brunswick Nuclear #1	193.893.076	3.34%	6.476.029	163%	3 160 457	%80 G	(465 444)	70.428	(252.084)	)0C7 7	0 750	100000	
	Brunswick Nuclear #2	238,279,380	2.19%	5,218,318	1.13%	2.692.557	-0.13%	(262,107)	-0.13.78 -0.13.78	(428 903)	1.42%	2,753,282	(3,722,747)	
	Brunswick Media Center	992,299	7.64%	75,812	3.46%	34,334	-0.09%	(893)	0.14%	(1.389)	3.23%	32.051	(43.761)	
	Harris Nuclear #1	1,321,137,208	2.48%	32,764,203	1.54%	20,345,513	-0.05%	(690,569)	-0.07%	(924,796)	1.42%	18.760.148	(14.004.055)	
	Robinson Nuclear #2	185,496,015	1.14%	2,114,655	1.27%	2,355,799	-0.12%	(222,595)	-0.20%	(370,992)	0.95%	1,762,212	(352,443)	
	Kobinson Offsite Media Center	201,797	3.60%	7,265	3.33%	6,720	-0.12%	(242)	-0.19%	(383)	3.02%	6,094	(1,171)	
	TOTAL Account 321	1,939,999,774	2.40%	46,656,282	1.47%	28,595,380	~20.0-	(1,301,520)	-0.10%	(1,978,524)	1.30%	25,315,334	(21,340,948)	
322.00	Reactor Plant Equipment Brunswick Nuclear #1	313.145.184	3.09%	9 676 186	1 64%	5 135 581	800	(250 546)	à	(0.00)	,			
	Brunswick Nuclear #2	291,273,386	2.86%	8,330,419	1.45%	4,223,464	0.10%	(291,273)	5.00% 5.10%	(349,528)	1.48%	4,634,549	(5,041,637)	
	Harris Nuclear #1	680,733,842	1.00%	6,807,338	0.70%	4,765,137	-0.04%	(272,294)	-0.02%	(136.147)	0.64%	4.356.697	(4,747,730)	
	Kobinson Nuclear #2	242,832,504	0.73%	1,772,677	0.97%	2,355,475	-0.13%	(315,682)	-0.16%	(388,532)	0.68%	1,651,261	(121,416)	
	TOTAL Account 322	1,527,984,917	1.74%	26,586,620	1.08%	16,479,657	-0.07%	(1,129,765)	-0.07%	(1,124,723)	0.93%	14,225,170	(12,361,450)	
323.00	Turbogenerator Units													
	Brunswick Nuclear #1	110,908,452	4.61%	5,112,880	2.14%	2,373,441	%00.0	0	0.17%	188,544	2.31%	2,561,985	(2,550,895)	
	brunswick hugiear #Z Harris Nuclear #4	95,076,085	4.32%	4,107,287	1.79%	1,701,862	0.00%	0 (	0.18%	171,137	1.97%	1,872,999	(2,234,288)	
	Robinson Nuclear #2	75,164,820	1.57%	1,180,088	0.97%	3,400,628 729,099	0.00% 0.00%	o c	0.14%	320,871	1.65%	3,781,699	(1,696,035)	
	TOTAL Account 323	540 949 997	5	000	,			i	!		2	21 0	(0.11.000)	
		107'0#C'01C	£ - -	19,677,969	1.62%	8,265,230	%00.0	0	0.16%	823,365	1.78%	9,088,595	(6,789,394)	
324.00	Accessory Electric Equipment Brunswick Nuclear #1	62 708 aa4	2 458	2 460	1000			,						
	Brunswick Nuclear #2	77.033,855	2.77%	2.133.838	1.00%	908,040,1	8000	0 0	0.09%	56,438	1.75%	1,097,407	(1,066,053)	
	Harris Nuclear #1	258,712,855	1.20%	3,104,554	0.76%	1,966,218	%00.0 %00.0	o c	0.03%	181,000	7.27.70	978,330	(1,155,508)	
	Robinson Nuclear #2	72,895,625	0.70%	510,269	0.55%	400,926	0.00%	0	0.10%	72,896	0.65%	473,822	(36,447)	
	TOTAL Account 324	471,351,326	1.68%	7,912,121	0.92%	4,317,112	%00.0	0	0.08%	379,763	1.00%	4,696,876	(3,215,245)	
325.00	Misc. Power Plant Equipment													

Progress Energy Carolinas, Inc

Summary or Original Cost of Nuclear Generation Utility Plant in Service as of December 31, 2002 and Related Annual Depreciation Expense Under Present and Proposed Rates
(By FERC Account)

				•			Proposed Rates	Rates				
	Original	Pres	resent Rates	Proposed P	lant Only Rates	Proposed Gr	Gross Salv Rates	8	COR Rates	Total Prop	poosed Rates	ţ
	Cost		Annual		Annuai		Annual		Annual	1	Annual	Change
	12/31/02	Rate %	Accrual	Rate %	Accrual	Rate %	Accrual	Rate %	Accrual	Rate %	Accrual	Depr. Exp.
	9	(G	(9)	£	(B)	ε	0	6	(%)	€	Ē	ε
	64,567,085	4.77%	3,079,850	2.38%	1,536,697	%60.0	(58,110)	0.02%	12,913	2.31%	1.491.500	(1,588,350)
	25,358,974	4.10%	1,039,718	1.93%	489,428	-0.12%	(30.431)	0.02%	5.072	1.83%	464.069	(575 649)
	2,356	7.90%	186	3.99%	\$	-0.11%	<u>.</u>	0.02%	0	3.90%	92	(96)
	66,558,279	3.66%	2,436,033	2.47%	1,643,990	-0.05%	(33.279)	0.02%	13,312	2.44%	1.624.022	(812.011)
	44,515,081	2.42%	1,077,265	2.22%	988,235	-0.12%	(53,418)	0.03%	13,355	2.13%	948.171	(129,094)
	4,056	3.72%	151	3.50%	142	-0.13%	(9)	0.03%		3.40%	138	(13)
	201,005,832	3.80%	7,633,203	2.32%	4,658,586	%60:0-	(175,246)	0.02%	44,653	2.25%	4,527,992	(3,105,211)
TOTAL Nuclear Production Plant	4,691,537,400	2.24%	105,277,844	1.34%	62,927,594	%90.0-	(2,606,531)	-0.04%	(1,855,466)	1.25%	58,465,596	(46,812,248)

Progress Energy Carolinas, Inc

Summary or Original Cost of Nuclear Generation Utility Plant in Service as of December 31, 2002 and Related Annual Depreciation Expense Under Present and Proposed Rates (By Plant Site)

					(By Pig	(By Plant Site)		0	ļ				
		Original	Presu	Present Rates	Proposed F	Proposed Plant Only Rates	Proposed Gr	Proposed Gross Salv Rates Pro	Pronoced	Proposed COP Dates	Total Broad	Total Drangered Dates	1
Account	t Doctoriosion	Cost		Annual		Annual		Annual	Decoration	Annual	lotal riop	Annual	Change
a)	(q)	(c)	Kate % (d)	Accrual (e)	Kate %	Accrual (g)	Rate %	Accual (i)	Rate %	Accrual (k)	Rate %	Accrual (m)	Depr., Exp.
	<b>DEPRECIABLE PLANT</b>												:
	Nuclear Production Plant												
320.02	Brunswick Nuclear #1	7 530	200	٩	270	Ş		•					
321.00		193,893,076	3.34%	6.476.029	1.63%	3.160.457	%00.0 90.00 %	0 (155 114)	0.00%	0	0.64%	48	0
322.00		313,145,184	3.09%	9,676,186	1.64%	5,135,581	%80°0	(250,516)	0.08%	(250.516)	1.42%	2,753,282	(3,722,747)
323.00	Turbogenerator Units Accessory Flantin Emiliament	110,908,452	4.61%	5,112,880	2.14%	2,373,441	%00'0	`o	0.17%	188,544	2.31%	2,561,985	(2,550,895)
325.00		64.567.085	3.45% 4.77%	2,163,460	1.66%	1,040,969	%00.0	0	0.09%	56,438	1.75%	1,097,407	(1,066,053)
	Total Brunswick Nuclear #1	745,230,321	3.56%	26,508,453	1.78%	13,247,193	%90.0- -0.06%	(58,110) (463,740)	0.02% -0.03%	12,913 (244,682)	2.31% 1.68%	1,491,500	(1,588,350)
	Brunswick Nuclear #2												
320.02	Land R	51,363	0.26%	134	0.26%	134	%00.0	0	0.00%	<b>-</b>	0.26%	132	c
321.00		238,279,380	2.19%	5,218,318	1.13%	2,692,557	-0.11%	(262,107)	-0.18%	(428.903)	0.52%	2 001 547	(3 246 774)
322.00		291,273,386	2.86%	8,330,419	1.45%	4,223,464	-0.10%	(291,273)	-0.12%	(349,528)	1.23%	3.582.663	(4.747.756)
323.00	lurbogenerator Units	95,076,085	4.32%	4,107,287	1.79%	1,701,862	0.00%	0	0.18%	171,137	1.97%	1,872,999	(2.234.288)
325.00		77,033,855	2.77%	2,133,838	1.18%	808'88	%00.0	0	0.09%	69,330	1.27%	978,330	(1,155,508)
20.070		25,358,974	4.10%	1,039,718	1.93%	489,428	-0.12%	(30,431)	0.02%	5,072	1.83%	464,069	(575,649)
		250'0 10' 17'	<b>6.00</b> %	40'023'/ I4	6,00%	10,016,444	-0.08%	(583,811)	9.00	(532,892)	1.22%	8,899,742	(11,929,972)
321.00		992,299	7.64%	75,812	3.46%	34,334	%60.0-	(883)	-0.14%	(1,389)	3.23%	32 053	(43.764)
325.00	MISC.	2,356	7.90%	186	3.99%	26	-0.11%	· 60	0.02%	0	3.90%	6	(10/,04)
	i otal Brunswick Media Center	994,655	7.64%	75,998	3.46%	34,428	<b>%60.0</b> -	(968)	-0.14%	(1,389)	3.23%	32,143	(43,855)
	Total Brunswick Nuclear	1,473,298,019	3.22%	47,414,165	1.58%	23,298,065	-0.07%	(1,048,447)	-0.05%	(778,963)	1.46%	21,470,656	(25,943,509)
320.02		40,754,273	1.50%	611,314	1.50%	611,314	0.00%	0	0.00%	o	1.50%	611 314	c
321.00		1,321,137,208	2.48%	32,764,203	1.54%	20,345,513	-0.05%	(696,098)	-0.07%	(924,796)	1.42%	18.760.148	(14 004 055)
322.00	Turbonnesses 11-16	680,733,842	1.00%	6,807,338	0.70%	4,765,137	-0.04%	(272,294)	-0.02%	(136,147)	0.64%	4,356,697	(2.450.641)
324.00		258,193,880	2.39%	5,477,734	1.51%	3,460,828	0.00%	0	0.14%	320,871	1.65%	3,781,699	(1,696,035)
325.00		66.558.279	3.66%	2 436 033	2,74	1,300,210	8000	0 00	%/0.0	181,099	0.83%	2,147,317	(957,237)
	Total Harris Nuclear #1	2,597,090,339	1.97%	51,201,176	1.26%	32,793,000	-0.05% -0.04%	(33,279)	0.02%	13,312 (545,661)	2.44% 1.20%	1,624,022	(812,011)
	Robinson Offsite Media Center												(2)
321.00	Š	201,797	3.60%	7,265	3.33%	6,720	-0.12%	(242)	-0.19%	(383)	3.02%	6.094	(1 171)
250.00	Total Dobinson Office Madis Control	4,056	3.72%	151	3.50%	142	-0.13%	(2)	0.03%	· <b></b>	3.40%	138	(13)
	oral Nobilison Offsite Media Center	205,853	3.60%	7,416	3.33%	6,862	-0.12%	(247)	-0.19%	(382)	3.03%	6,232	(1.184)
													*

Progress Energy Carolinas, Inc

Summary or Original Cost of Nuclear Generation Utility Plant in Service as of December 31, 2002 and Related Annual Depreciation Expense Under Present and Proposed Rates (By Plant Site)

							Proposed Rates	ates				
	Original	Pres	Present Rates	Proposed	Plant Only Rates	Proposed Gn	Gross Salv Rates	Proposed	COR Rates	Total Prop	Total Proposed Rates	ţ
	Cost		Annual		Annual		Annual		Annual		1	, and a
Description	12/31/02	Rate %	Accrual	Rate %	Accrual	Rate %	Accrual	Rate %	Account	Rate %	A Create	Constant
<b>(p</b> )	(2)	9	(e)	ε	æ	ε	8		3	200		CAD. CAD.
Robinson Nuclear #2				:	ì	3	5	5	3	Ξ		€
Land Rights	39,144	0.34%	133	0.34%	133	%00.0	c	76000	c	976	5	•
Structures and Improvements	185,496,015	1.14%	2.114,655	1.27%	2,355,799	20.0	(222 595)	8000	1000 026/	645.0	133	0 (1)
Reactor Plant Equipment	242,832,504	0.73%	1.772.677	%260	2.355.475	13,6	(345,582)	0.20%	(266,075)	%06.0 0.00%	212,207,1	(352,443)
Turbogenerator Units	75,164,820	1.57%	1.180,088	%260	729 099	90.0	(200,010)	6.00	(200,332)	0.00%	1,65,156,1	(121,416)
Accessory Electric Equipment	72,895,625	0.70%	510.269	0.55%	400 926	0.00	•	6.10	142,013	1.15%	216,178	(308,176)
Misc. Power Plant Equipment	44.515.081	2 42%	1 077 265	2 22%	986 986	6.00.0	0 (0)	0.10%	12,886	809.0 809.0	473,822	(36,447)
Total Pobiocon Mucloss #5	007 070 003	200	2001	Z. Z. Z.	200,000	& J. O	(53,418)	0.03%	13,355	2.13%	948,171	(129,094)
	601,843,109	& 5.	/80'cca'a	1.10%	6,829,667	-0.10%	(591,695)	%60.0 <del>-</del>	(530,460)	0.92%	5,707,511	(947,576)
Total Robinson Nuclear	621,149,042	1.07%	6,662,503	1.10%	6,836,529	-0.10%	(591,942)	-0.09%	(530,842)	0.92%	5,713,743	(948,760)
TOTAL Nuclear Production Plant	4.691.537.400	2.24%	105 277 844	134%	R2 027 F04	2000	(10,000,00	à	100			
					126,126,20	-0.00%	(Lec'ana'z)	\$40.0 %	(1,855,456)	1.25%	58,465,596	(46,812,248)

Progress Energy Carolinas, Inc

Summary of Original Cost of Nuclear Generation Utility Plant in Service and Calculation of Annual Depreciation Rates and Depreciation Expense Based Upon Utilization of Book Deprecation Reserve and Average Remaining Lives as of December 31, 2002

Description (b)	Original Cost 1 <u>2/31/02</u> (c)	Estim Net (d)	Estimated Future Net Salvage % Amount (d) (e)	Original Cost Less Salvage (f)	Book Depreciation Reserve (g)	Net Original Cost Less Salvage (h)	A.S.L./ Survivor Curve	Average Remaining Life ()	Annual Depreciation Accrual (k)	Annual Deprecation Rate (l)
DEPRECIABLE PLANT										
Nuclear Production Plant Land Rights	40,852,313	0.0%	0	40,852,313	18,524,267.96	22.328.045	50-72	36.6	610.056	1.49%
Structures and improvements	1,939,999,774	-1.0%	-19,399,998	1,959,399,772	1,019,571,555.58	939,828,216 (1)	120-L1.5	37.2	25.264.199	1.30%
Reactor Plant Equipment	1,527,984,917	-2.4%	-36,671,638	1,564,656,555	1,097,541,654.63	467,114,901 (1)	100-L0.5	32.9	14,198,021	0.93%
Turbogenerator Units	510,343,237	-4.5%	-22,965,446	533,308,683	276,208,768.84	257,099,915 (1)	55-L1	28.3	9.084,803	1.78%
Accessory Electric Equipment	471,351,326	-2.4%	-11,312,432	482,663,758	341,773,350.40	140,890,408 (1)	60-L1.5	30.0	4.696,347	1.00%
Misc. Power Plant Equipment	201,005,832	~9.0-	-1,206,035	202,211,867	77,893,835.01	124,318,032 (1)	45-R1	27.4	4,537,154	2.26%
TOTAL Nuclear Production Plant	4,691,537,400	-2.0%	-91,555,549	4,783,092,949	2,831,513,432.42	1,951,579,516			58,390,581	1.24%

Progress Energy Carolinas, Inc

Summary of Original Cost of Nuclear Generation Utility Plant in Service and Calculation of Annual Depreciation Rates and Depreciation Expense Based Upon Utilization of Book Deprecation Reserve and Average Remaining Lives as of December 31, 2002

	Annual Deprecation Rate (m)		0.64% 0.26% 1.50% 0.34%	1.49%	1.41% 0.84% 3.23% 1.42% 0.95%	1.30%	1.48% 1.23% 0.63% 0.68%	0.93%	2.31% 1.97% 1.65% 1.17%	1.78%	1.75% 1.27% 0.83% 0.64%	4 00%
	Annual Depreciation D Accrual		47.88 134.52 609,739.44 134.03	610,055.87	2,736,828.00 2,004,140.25 32,027.78 18,720,512.24 1,764,592.77 6,098.33	25,264,199.37	4,637,135.52 3,594,477.60 4,315,466.09 1,650,942.09	14,198,021.30	2,558,282.87 1,868,419.17 3,780,314.26 877,786.33	9,084,802.63	1,098,094.75 980,607.88 2,147,692.78 469,951.53	7 606 346 03
	Annual Depr. Accrual Basis (k)		47.88 134.52 609,739.44 134.03	610,055.87	2,643,257.67 1,935,620.02 30,932.77 18,080,470.35 1,704,262.51 5,889.84	24,400,433.16	4,727,072.92 3,664,192.61 4,399,164.71 1,682,962.17	14,473,392.41	2,525,746.39 1,844,656.44 3,732,235.87 866,622.56	8,969,261.26	1,102,402.78 984,454.99 2,156,118.59 471,795.24	4 744 774 64
	Average Remaining Life 0		36.6 36.6 36.6 36.6	36.6	32.4 30.3 32.4 41.4 26.9 27.0	37.2	30.8 29.0 39.1 25.7	32.9	27.6 25.8 32.0 23.5	28.3	27.7 26.3 33.9 24.1	000
	A.S.L./ Survivor Curve		50-R2 50-R2 50-R2 50-R2		(1) 120-L1.5 (1) 120-L1.5 (1) 120-L1.5 (1) 120-L1.5 (1) 120-L1.5 (1) 120-L1.5		(1) 100-L0.5 (1) 100-L0.5 (1) 100-L0.5 (1) 100-L0.5		(1) 55-L1 (1) 55-L1 (1) 55-L1 (1) 55-L1		(1) 60-L1.5 (1) 60-L1.5 (1) 60-L1.5 (1) 60-L1.5	
10er 31, 2002	Net Original Cost Less Salvage (h)		1,753 4,923 22,316,463 4,906	22,328,044.82	85,641,548 58,649,287 1,002,222 748,531,473 45,844,662	939,828,216.44	145,593,846 106,261,586 172,007,340 43,252,128	467,114,899.65	69,710,600 47,592,136 119,431,548 20,365,630	257,099,914.51	30,536,557 25,891,166 73,092,420 11,370,265	140 890 409 03
Book Deprecation Keserve and Average Remaining Lives as of December 31, 2002	Book Depreciation Reserve (9)		5,779.94 46,439.77 18,437,899.55 34,238.70	18,524,267.96	110,190,458.08 182,012,886.93 0.00 585,817,107.77 141,506,313.04 44,789.76	1,019,571,555.58	175,066,822.27 192,002,361,45 525,064,114,37 205,408,356,54	1,097,541,654.63	46,188,731.42 51,762,373.18 120,076,057.51 58,181,606.73	276,208,768.84	33,677,450.09 52,991,501.92 191,829,543.78 63,274,854.61	341 773 350 40
nd Average Kemainii	Original Cost Less Salvage (f)		7,532 51,363 40,754,273 39,144	40,852,312.78	185,832,007 240,662,174 1,002,222 1,334,348,580 187,350,975 203,815	1,959,399,772.02	320,660,668 298,263,947 697,071,454 248,660,484	1,564,656,554.28	115,899,332 99,354,509 239,507,605 78,547,237	533,308,683.35	64,214,007 78,882,668 264,921,964 74,645,120	482 663 759 43
precation Reserve a	Estimated Future  Net Salvage Amount (e)		0000	0.00	(1,938,931) (2,382,794) (9,923) (13,211,372) (1,854,960) (2,018)	(19,399,998.00)	(7,515,484) (6,990,561) (16,337,612) (5,827,980)	(36,671,637.00)	(4,990,880) (4,278,424) (10,313,725) (3,382,417)	(22,965,446.00)	(1,505,016) (1,848,813) (6,209,109) (1,749,495)	(11 312 433 00)
Book De	Estim Ne (d)		% % % % 0 0 0 0	%0.0	-1.0% -1.0% -1.0% -1.0% -1.0%	-1.0%	-2.4% -2.4% -2.4% -2.4%	-2.4%	4 4 4 4 % % % % % % % % % % % % % % % %	4.5%	-2.4% -2.4% -2.4% -2.4%	-2.4%
	Original Cost 12/31/02 (c)		7,532.48 51,363.07 40,754,272.90 39,144.33	40,852,312.78	193,893,075.51 238,279,379,60 992,298.68 1,321,137,208,33 185,496,014,58	1,939,999,774.02	313,145,184,21 291,273,386,25 680,733,842,48 242,832,504,34	1,527,984,917.28	110,908,451.67 95,076,085.34 229,193,880.44 75,164,819.90	510,343,237.35	62,708,991.20 77,033,855.15 258,712,855.08 72,895,625.00	471,351,326,43
	Description (b)	DEPRECIABLE PLANT	Nuclear Production Plant Land Rights Brunswick Nuclear #1LR Brunswick Nuclear #2 LR Harris Nuclear #1 LR Robinson Nuclear #2LR	TOTAL Account 320	Structures and Improvements Brunswick Nuclear #1 Brunswick Nuclear #2 Brunswick Media Center Harris Nuclear #1 Robinson Nuclear #2 Robinson Offsite Media Center	TOTAL Account 321	Reactor Plant Equipment Brunswick Nuclear #1 Brunswick Nuclear #2 Harris Nuclear #1 Robinson Nuclear #2	TOTAL, Account 322	Turbogenerator Units Brunswick Nuclear #1 Brunswick Nuclear #2 Harris Nuclear #1 Robinson Nuclear #2	TOTAL Account 323	Accessory Electric Equipment Brunswick Nuclear #1 Brunswick Nuclear #2 Harris Nuclear #1 Robinson Nuclear #2	TOTAL Account 324
	Location <u>Code</u>				2036 2034 2036 2046 2030 2030		2036 2034 2046 2030		2036 2034 2046 2030		2036 2034 2046 2030	
	Account No. (a)		320.02		321.00		322.00		323.00		324.00	

Progress Energy Carolinas, Inc

Summary of Original Cost of Nuclear Generation Utility Plant in Service and Calculation of Annual Depreciation Rates and Depreciation Expense Based Upon Utilization of Book Deprecation Reserve and Average Remaining Lives as of December 31, 2002

Annual Deprecation Rate (m)	2.31% 1.84% 3.90% 2.44% 3.39%	2.26%	1.24%
Annual A Depreciation Dep	1,494,495,99 466,156,19 91,98 1,626,677,72 949,595,02	4,537,154.45	58,390,580.55
Annual Depr. Accrual Basis (k)	1,469,957.35 458,502.21 90.47 1,599,968.75 934,003.29 135.30	4,462,657.37	57,630,571.68
Average Remaining Life ()	26.9 25.0 26.2 32.1 23.5 23.5	27.4	33.4
A.S.L./ Survivor Curve	() 45-R1 () 45-R1 () 45-R1 () 45-R1 () 45-R1 () 45-R1		
Net Original Cost Less Salvage (h)	39,541,853 (7 11,462,555 (7 2,370 (7 51,358,937 (7 21,949,077 (7 3,179 (7	124,318,031.96	1,951,579,516.41
Book Depreciation Reserve (g)	25,412,635.77 14,048,572.70 0.00 15,598,632.67 22,833,093.39	77,893,835.01	2,831,513,432.42
Original Cost Less Salvage (f)	64,954,488 25,511,128 2,370 66,957,629 44,782,171	202,211,866.97	4,783,092,948.83
Estimated Future Net Salvage Amount (e)	(387,403) (152,154) (14) (399,350) (267,090)	(1,206,035.00)	(91,555,549.00)
Estim Ne (d)	%9:0- %9:0- %9:0- %9:0-	%9·0-	-2.0%
Original Cost 12/31/02.	64,567,085,44 25,358,974,01 2,356,35 66,558,279,43 44,515,080,77 4,055,97	201,005,831.97	4,691,537,399.83
Describtion (t)	Misc. Power Plant Equipment Brunswick Nuclear #1 Brunswick Nuclear #2 Brunswick Media Center Harris Nuclear #1 Robinson Nuclear #2 Robinson Offsite Media Center	TOTAL Account 325	TOTAL Nuclear Production Plant
Account Location No. Code (a)	2036 2034 2036 2046 2030		
Account No. (a)	325.00		

#### **Nuclear Generation Plant**

#### Study Results

#### Account 321 - Structures & Improvements

The current surviving investment in this account totals \$1,939,999,774, has achieved a current average age of 16.0 years, and is being depreciated using an annual depreciation rate of 2.40 percent.

The available historical retirements totaling \$25,272,376 were analyzed via the Retirement Rate Method, which have occurred at an average age of 12.7 years. Based upon an analysis of the company's historical data, an lowa 120-L1.5 life and curve is estimated as the applicable service life characteristics. Application of the recommended service life parameters to the current surviving investment produces an implicit average service life of 52.5 years and an average remaining life of 37.2 years.

An analysis was completed of the company's historical salvage data experienced in conjunction with retirements during the 1979-2002 experience band which trended to more than negative twenty (20) percent. Accordingly, based upon historical net salvage future interim net salvage is estimated at negative twenty (20) percent of the anticipated level of future interim retirements which is negative (0.1) percent of the Company's current plant investment. The resulting recommended annual depreciation rate is 1.30 percent.

#### Account 322 - Reactor Plant Equipment

The current surviving investment in this account totals \$1,527,984,917, has achieved a current average age of 15.1 years, and is being depreciated using an annual depreciation rate of 1.74 percent.

The available historical retirements totaling \$56,941,448 were analyzed via the Retirement Rate Method, which have occurred at an average age of 13.1 years. Based

upon an analysis of the company's historical data, an lowa 100-L0.5 life and curve is estimated as the applicable interim retirement rate life characteristics. Application of the recommended service life parameters to the current surviving investment produces an implicit average service life of 45.9 years and an average remaining life of 32.9 years.

An analysis was completed of the company's historical salvage data experienced in conjunction with retirements during the 1979-2002 experience band which trended to more than negative sixty-five (65) percent. Negative sixty (60) percent net salvage applicable to the anticipated level of the future interim retirements (which is 2.4% of the current plant in service balance) is estimated for the property investment.

Based upon the estimated interim life and curve relative to the company's current surviving investment of an lowa 100-L0.5 and the negative 2.4 percent negative net salvage factor, the proposed annual depreciation rate for this property group is 0.93 percent.

#### Account 323 - Turbogenerator Units

The current surviving investment in this account totals \$510,343,237, has achieved a current average age of 15.0 years, and is being depreciated using an annual depreciation rate of 3.11 percent.

The available historical retirements totaling \$45,776,456 were analyzed via the Retirement Rate Method, which have occurred at an average age of 15.9 years. Based upon an analysis of the company's historical data, an Iowa 55-L1life and curve is estimated as the applicable service life characteristics. Application of the recommended service life parameters to the current surviving investment produces an implicit average service life of 40.2 years and an average remaining life of 28.3 years.

An analysis was completed of the company's historical salvage data experienced in conjunction with retirements during the 1979-2002 experience band which trended to more than negative six (6) percent. Negative future interim net salvage is estimated at negative

ten (10) percent of the anticipated level of future interim retirements which is negative (4.5) percent of the Company's current plant investment.

The resulting recommended annual depreciation rate is 1.78 percent.

#### Account 324 - Accessory Electric Equipment

The current surviving investment in this account totals \$471,351,326, has achieved a current average age of 16.6 years, and is being depreciated using an annual depreciation rate of 1.68 percent.

The available historical retirements totaling \$18,587,950 were analyzed via the Retirement Rate Method, which have occurred at an average age of 11.9 years. Based upon an analysis of the company's historical data, an lowa 60-L1.5 life and curve is estimated as the applicable service life characteristics. Application of the recommended service life parameters to the current surviving investment produces an implicit average service life of 44.7 years and an average remaining life of 30 years.

An analysis was completed of the company's historical salvage data experienced in conjunction with retirements during the 1979-2002 experience band which trended to more than negative twelve (12) percent. Accordingly, future net salvage is estimated at negative ten (10) percent of the anticipated level of future interim retirements which is negative (2.4) percent of the Company's current plant investment.

The resulting recommended annual depreciation rate is 1.00 percent.

#### Account 325 - Misc. Power Plant Equipment

The current surviving investment in this account totals \$201,005,832, has achieved a current average age of 12.6 years, and is being depreciated using an annual depreciation rate of 3.80 percent.

The available historical retirements totaling \$28,692,531 were analyzed via the Retirement Rate Method, which have occurred at an average age of 11.1 years. Based upon an analysis of the company's historical data, an lowa 45-R1 life and curve is estimated as the applicable service life characteristics. Application of the recommended

service life parameters to the current surviving investment produces an implicit average service life of 36.6 years and an average remaining life of 27.4 years.

An analysis was completed of the company's historical salvage data experienced in conjunction with retirements during the 1979-2002 experience band which produced little net salvage, nevertheless, some level of negative net salvage is anticipated throughout the remaining life of the property group. Accordingly, a modest future net salvage is estimated at negative two (2) percent of the anticipated level of future interim retirements which is negative (0.6) percent of the Company's current plant investment.

The resulting recommended annual depreciation rate is 2.25 percent.

# Progress Energy Carolinas, Inc Total Company 320.02 NUCLEAR PRODUCTION LAND RIGHTS

# Original Cost Of Utility Plant In Service And Development Of Composite Remaining Life as of December 31, 2002 Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 50

Survivor Curve: R2

Year	Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
1975	51,363.07	50.00	1,027.26	27.40	28,150.28
1982	11,972.69	50.00	239.45	32.64	7,815.95
1983	861.25	50.00	17.22	33.42	575.68
1984	794.22	50.00	15.88	34.21	543.40
1985	38.77	50.00	0.78	35.01	27.14
1986	6.54	50.00	0.13	35.81	4.68
1987	40,787,276.15	50.00	815,742.21	36.62	29,872,085.03
1989	0.09	50.00	0.00	38.26	0.07
tal	40,852,312.78	50.00	817,042.94	36.61	29,909,202.24

Composite Average Remaining Life ... 36.61 Years

#### Total Company 321.00 STRUCTURES AND IMPROVEMENTS

#### Original Cost Of Utility Plant In Service And Development Of Composite Remaining Life as of December 31, 2002 Based Upon Broad Group/Remaining Life Procedure and Technique

Year	Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
		BR	UNSWICK NUCLEAR	. #1	
Interim .	Survivor Curve:	Iowa 120 L1.5			
Probable	e Retirement Yea	r: 2036			
1977	53,321,801.03	56.51	943,536.11	31.89	30,089,680.72
1978	888,018.55	55.65	15,958.44	31.95	509,868.66
1979	4,774,488.98	54.77	87,167.95	32.01	2,789,936.09
1980	3,557,751.37	53.90	66,011.24	32.06	2,116,610.17
1981	7.086,506.21	53.01	133,672.71	32.12	4,293,723.28
1982	823,924.57	52.13	15,806.18	32.18	508,592.09
1983	9,982,725.10	51.23	194,842.59	32.23	6,280,015.11
1984	5,252,614.54	50.34	104,346.17	32.28	3,368,772.23
1985	722,775.74	49.44	14,620.00	32.34	472,744.14
1986	7,207,909.41	48.53	148,517.97	32.39	4,810,094.44
1987	15,516,929.21	47.62	325,829.82	32.44	10,569,268.72
1988	5,548,274.76	46.71	118,783.17	32.49	3,858,974.93
1989	2,416,508.81	45.79	52,771.75	32.54	1,716,977.75
1990	3,960,730.84	44.87	88,270.57	32.58	2,876,136.21
1991	8,767,123.86	43.95	199,501.01	32.63	6,509,350.00
1992	16,919,501.17	43.02	393,325.01	32.67	12,851,381.43
1993	3,716,370.12	42.08	88,307.53	32.72	2,889,244.89
1994	13,828,257.81	41.15	336,054.82	32.76	11,009,498.73
1995	11,793,120.03	40.21	293,289.00	32.80	9,620,684.34
1996	12,406,717.03	39.27	315,951.33	32.84	10,376,854.00
1997	3,129,651.72	38.32	81,665.80	32.88	2,685,299.37
1999	542,396.26	36.42	14,891.38	32.96	490,768.87
2000	1,664,143.33	35.47	46,917.35	32.99	1,547,892.35
2001	64,835.06	34.51	1,878.56	33.03	62,040.85

## Total Company 321.00 STRUCTURES AND IMPROVEMENTS

Year	Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
Total	193,893,075.51	47.50	4,081,916.48	32.41	132,304,409.35
		BR	UNSWICK NUCLEAR	#2	
Interim S	Survivor Curve:	Iowa 120 L1.5			
Probable	e Retirement Yea	r: 2034			
1975	106,688,986.30	56.51	1,887,875.30	30.01	56,646,859.08
1976	3,572,840.36	55. <b>65</b>	64,206.96	30.06	1,930,043.43
1977	1,426,569.09	54.77	26,044.90	30.11	784,284.54
1978	1,087,694.58	53.90	20,181.31	30.16	608,765.67
1979	10,924,229.91	53.01	206,063.66	30.21	6,226,067.97
1980	7,198,176.11	52.13	138,089.94	30.26	4,179,290.52
1981	1,742,005.51	51.23	34,000.42	30.31	1,030,709.56
1982	954,572.85	50.34	18,963.13	30.36	575,782.18
1983	20,859,124.35	49.44	421,929.42	30.41	12,831,270.01
1984	10,247,372.67	48.53	211,145.68	30.46	6,430,999.33
1985	6,008,970.81	47.62	126,178.44	30.50	3,848,699.16
1986	12,618,341.49	46.71	270,146.43	30.55	8,252,278.77
1987	993,069.01	45.79	21,686.65	30.59	663,433.05
1988	28,422,560.72	44.87	633,437.56	30.64	19,405,436.45
1989	1,401,411.26	43.95	31,889.93	30.68	978,303.04
1990	794,101.87	43.02	18,460.36	30.72	567,081.62
1991	195,072.81	42.08	4,635.28	30.76	142,572.46
1992	4,512,744.87	41.15	109,668.89	30.80	3,377,578.60
1993	650.10	40.21	16.17	30.84	498.56
1994	4,518,311.54	39.27	115,064.01	30.87	3,552,509.18
1995	8,240,260.52	38.32	215,023.12	30.91	6,646,504.87
1996	1,175,266.03	37.37	31,445.64	30.95	973,114.27
1997	281,340.27	36.42	7,724.14	30.98	239,287.96
1998	3,001,130.32	35.47	84,611.16	31.01	2,624,000.21

#### Total Company 321.00 STRUCTURES AND IMPROVEMENTS

Year	Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
1999	793,599.06	34.51	22,994.14	31.04	713,837.95
2000	620,977.19	33.55	18,506.84	31.07	575,098.23
Total	238,279,379.60	50.27	4,739,989.46	30.34	143,804,306.66
		BRUNSWICE	C OFFSITE MEDIA CE	ENTER #MC	
Interim	Survivor Curve:	Iowa 120 L1.5			
Probabi	le Retirement Yea	r: 2036			
1986	887,998.23	48.53	18,297.08	32.39	592,592.82
1990	104,300.45	44.87	2,324.49	32.58	75,739.13
Total	992,298.68	48.12	20,621.56	32.41	668,331.95
		Н	ARRIS NUCLEAR #1		
Interim	Survivor Curve: 1				
	e Retirement Year				
1987	,250,353,031.00	56.51	22,125,157.30	41.40	916,014,023.93
1988	12,340,788.14	55.65	221,774.39	41.49	9,201,339.48
1989	10,576,372.44	54.77	193,093.07	41.58	8,028,025.73
1990	5,318,143.19	53.90	98,673.91	41.66	4,110,791.32
1991	6,156,920.63	53.01	116,137.94	41.74	4,847,758.28
1992	5,633,057.36	52.13	108,064.67	41.82	4,519,548.28
1993	1,463,699.47	51.23	28,568.45	41.90	1,197,069.50
1994	3,505,164.77	50.34	69,632.09	41.98	2,923,083.04
1995	4,752,612.48	49.44	96,133.81	42.05	4,042,824.03
1996	2,334,419.62	48.53	48,100.39	42.13	2,026,335.99
1997	3,112,582.98	47.62	65,359.09	42.20	2,757,970.08
1998	2,032,318.52	46.71	43,509.97	42.27	1,839,017.95
1999	2,422,681.84	45.79	52,906.55	42.33	2,239,732.30
2000	7,008,918.46	44.87	156,203.81	42.40	6,622,833.88

## Total Company 321.00 STRUCTURES AND IMPROVEMENTS

Year	r Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
2001	1,090,053.71	43.95	24,804.81	42.46	1,053,245.74
2002	3,036,443.72	43.02	70,587.73	42.52	3,001,515.31
Total	321,137,208.33	56.17	23,518,707.98	41.43	974,425,114.85
		ROBINSON	OFFSITE MEDIA CEN	NTER #MC	
Interim	Survivor Curve: Io				
	le Retirement Year:	2030			
1991	199,986.33	38.32	5,218.49	26.98	140,783.78
1992	1,810.99	37.37	48.46	27.01	1,308.66
Total	201,797.32	38.31	5,266.94	26.98	142,092.44
		ROE	BINSON NUCLEAR #2	!	
Interim ,	Survivor Curve: Ion	va 120 L1.5			
Probable	e Retirement Year:	2030			
1971	19,061,977.86	56.51	337,304.14	26.25	8,853,879.77
1972	1,028,169.36	55.65	18,477.07	26.29	485,802.43
1 <b>97</b> 3	8,305.00	54.77	151.62	26.33	3,992.74
1974	34,333.92	53.90	637.04	26.38	16,802.00
1975	283,857.90	53.01	5,354.41	26.42	141,444.32
1976	18,779.00	52.13	360.26	26.46	9,531.24
1977	19,887.20	51.23	388.16	26.50	10,284.75
1978	935,179.40	50.34	18,577.87	26.54	492,964.76
1979	4,596,701.50	49.44	92,980.11	26.57	2,470,641.31
1980	5,045,071.15	48.53	103,952.99	26.61	2,766,147.44
1981	1,535,815.11	47.62	32,249.57	26.65	859,345.58
1982	302,995.71	46.71	6,486.84	26.68	173,088.97
1983	254,078.41	45.79	5,548.57	26.72	148,250.26
1984	13,708,586.70	44.87	305,515.53	26.75	8,173,618.48

## Progress Energy Carolinas, Inc Total Company 321.00 STRUCTURES AND IMPROVEMENTS

# Original Cost Of Utility Plant In Service And Development Of Composite Remaining Life as of December 31, 2002 Based Upon Broad Group/Remaining Life Procedure and Technique

Yea	er Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
198	5 2,720,662.50	43.95	61,910.26	26.79	1,658,360.16
198	6 18,774,103.08	43.02	436,438.65	26.82	11,705,521.95
198	7 6,883,559.22	42.08	163,565.55	26.85	4,392,355.35
198	8 608,588.30	41.15	14,789.93	26.89	397,645.86
1989	9 32,484,235.16	40.21	807,866.70	26.92	21,746,064.53
1990	2,090,978.46	39.27	53,249.17	26.95	1,434,998.95
1991	16,860,056.79	38.32	439,949.92	26.98	11,868,924.25
1992	2 12,212,998.92	37.37	326,773.27	27.01	8,825,365.23
1993	8,255,640.17	36.42	226,656.91	27.04	6,127,994.13
1994	10,579,937.74	35.47	298,281.21	27.06	8,072,779.72
1995	5,535,151.93	34.51	160,378.29	27.09	4,344,848.22
1996	8,591,360.34	33.55	256,046.31	27.12	6,943,269.35
1997	2,069,231.10	32.59	63,488.38	27.14	1,723,177.77
1998	298,597.18	31.63	9,440.86	27.17	256,470.34
1999	5,783,454.77	30.66	188,620.97	27.19	5,128,479.77
2000	1,449,052.25	29.69	48,800.94	27.21	1,327,950.93
2001	857,800.60	28.72	29,865.33	27.23	813,313.86
2002	2,606,867.85	27.75	93,943.17	27.25	2,560,209.01
Total	185,496,014.58	40.25	4,608,050.02	26.90	123,933,523.41
Accoun	t				
Total	1,939,999,774.02	52.47	36,974,552.44	37.20	1,375,277,778.67

Composite Average Remaining Life ... 37.20 Years

#### Progress Energy Carolinas, Inc Total Company 322.00 REACTOR PLANT EQUIPMENT

Avg. Annual

Original

Year

Avg. Service

# Original Cost Of Utility Plant In Service And Development Of Composite Remaining Life as of December 31, 2002 Based Upon Broad Group/Remaining Life Procedure and Technique

Avg. Remaining

Future Annual

1007	Cost	Life	Accrual	Life	Accruals
(1)	(2)	(3)	(4)	(5)	(6)
		вк	UNSWICK NUCLEAR	t#1	
Interim	Survivor Curve:	Iowa 100 L0.5			
Probable	e Retirement Yea	r: 2036			
1977	105,552,964.70	52.49	2,011,041.85	30.07	60,462,682.79
1978	548,334.56	51.76	10,593.40	30.13	319,212.22
1979	3,218,074.94	51.03	63,062.10	30.21	1,904,792.97
1980	2,822,094.93	50.29	56,114.42	30.27	1,698,790.84
1981	3,941,572.19	49.55	79,552.94	30.35	2,414,149.64
1982	91,088.73	48.79	1,866.78	30.42	56,779.70
1983	22,596,276.81	48.04	470,406.39	30.49	14,342,296.43
1984	10,546,791.12	47.27	223,117.70	30.56	6,818,245.62
1985	31,297,869.07	46.50	673,104.32	30.63	20,619,054.02
1986	525,821.07	45.72	11,501.19	30.70	353,119.83
1987	3,320,537.65	44.93	73,899.38	30.78	2,274,400.75
1988	8,248,660.01	44.14	186,870.65	30.85	5,764,815.04
1989	10,454,619.16	43.34	241,210.77	30.92	7,458,612.51
1990	992,136.34	42.54	23,324.09	30.99	722,859.77
1991	13,413,991.17	41.73	321,483.62	31.07	9,987,383.08
1992	5,554,336.80	40.91	135,779.10	31.14	4,227,770.09
1994	34,460,672.22	39.25	877,933.61	31.28	27,464,320.44
1995	11,010,686.50	38.42	286,623.53	31.36	8,988,084.87
1996	548,946.18	37.57	14,610.46	31.43	459,206.71
1997	11,302,535.32	36.72	307,777.04	31.51	9,697,094.50
1998	4,644,589.22	35.87	129,490.69	31.58	4,089,269.01
1999	758,741.55	35.01	21,673.81	31.66	686,171.10
2000	3,970,632.85	34.14	116,302.20	31.73	3,690,761.20
2001	544,549.02	33.27	16,368.38	31.82	520,823.15
2002	22,778,662.10	32.39	703,253.06	31.90	22,433,475.16

#### Progress Energy Carolinas, Inc Total Company

### 322.00 REACTOR PLANT EQUIPMENT

Year	Original A Cost	lvg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
2000	903,744.50	32.39	27,901.60	29.98	836,462.11
2001	356,756.09	31.51	11,323.07	30.05	340,312.29
2002	5,265.65	30.62	171.98	30.13	5,181.15
Total	291,273,386.25	44.51	6,544,000.10	29.02	189,893,700.30
		1	HARRIS NUCLEAR #1		
Interim S	Survivor Curve: Iow	a 100 L0.5			
Probable	Retirement Year:	2046			
1987	504,086,813.30	52.49	9,604,085.30	38.61	370,850,243.12
1988	11,543,160.56	51.76	223,004.98	38.73	8,636,645.45
1989	759,006.98	51.03	14,873.67	38.84	577,748.11
1990	2,176,312.00	50.29	43,273.70	38.96	1,685,809.43

#### Progress Energy Carolinas, Inc Total Company 322.00 REACTOR PLANT EQUIPMENT

### Original Cost Of Utility Plant In Service And Development Of Composite Remaining Life as of December 31, 2002 Based Upon Broad Group/Remaining Life Procedure and Technique

Year	Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
		RC	DBINSON NUCLEAR	#7	
Interim	Survivor Curve:		211.12011.1100221.11		
	le Retirement Yea				
1971	15,837,152.89	52.49	301,736.45	24.96	7,530,744.40
1972	1,286,059.00	51.76	24,845.67	25.00	621,229.91
1973	54,541.00	51.03	1,068.80	25.05	26,776.01
1974	430,990.31	50.29	8,569.79	25.10	215,105.00
1975	651,005.94	49.55	13,139.28	25.15	330,416.26
1976	180,576.81	48.79	3,700.76	25.20	93,244.12
1977	3,321,457.02	48.04	69,145.67	25.25	1,745,681.31
1978	2,883,979.67	47.27	61,010.68	25.29	1,543,213.73
1979	457,922.96	46.50	9,848.27	25.35	249,606.25
1980	2,353,506.65	45.72	51,477.84	25.39	1,307,191.14
1981	392,582.45	44.93	8,737.02	25.44	222,310.36
1982	2,658,449.06	44.14	60,226.28	25.49	1,535,346.49
1983	3,677,645.47	43.34	84,851.27	25.54	2,167,484.77
1984	112,405,482.50	42.54	2,642,535.46	25.59	67,630,195.27
1985	7,885,291.08	41.73	188,981.18	25.64	4,846,336.58
1986	2,514,589.01	40.91	61,470.64	25.69	1,579,361.17
1987	8,205,326.25	40.08	204,709.78	25.74	5,270,161.78
1988	1,771,148.77	39.25	45,122.48	25.79	1,163,910.99
1989	14,780,935.13	38.42	384,768.37	25.84	9,944,106.71
1990	2,960,008.77	37.57	78,782.00	25.89	2,039,873.19
1991	13,430,248.34	36.72	365,716.37	25.94	9,488,232.97
1992	13,044,001.10	35.87	363,665.46	25.99	9,452,555.45
1993	4,922,828.21	35.01	140,622.93	26.04	3,662,413.85
1994	11,399,059.42	34.14	333,885.23	26.09	8,711,915.82
1995	4,041,221.39	33.27	121,473.47	26.14	3,175,894.79
1996	2,093,262.49	32.39	64,625.98	26.19	1,692,780.93
.550	2,000,202.70	02.00	07,020.00	20.13	1,002,100.00

## Progress Energy Carolinas, Inc Total Company

322.00 REACTOR PLANT EQUIPMENT

# Original Cost Of Utility Plant In Service And Development Of Composite Remaining Life as of December 31, 2002 Based Upon Broad Group/Remaining Life Procedure and Technique

Year	Original Cost	9	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
1997	377,629.11	31.51	11,985.55	26.25	314,581.10
1998	266,520.25	30.62	8,704.64	26.30	228,900.43
1999	3,150,854.24	29.72	106,003.36	26.35	2,793,349.97
2000	22,734.89	28.82	788.73	26.40	20,824.91
2001	3,756,587.46	27.92	134,546.28	26.46	3,560,441.97
2002	1,618,906.70	27.01	59,934.99	26.52	1,589,396.16
Total	242,832,504.34	40.36	6,016,680.68	25.72	154,753,583.79
Accoun Total	<i>t</i> 1,527,984,917.28	45.86	33,315,511.22	32.93	1,096,977,826.84

Composite Average Remaining Life ... 32.93 Years

Year	Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
		BR	UNSWICK NUCLEAR	L#1	
Interim	Survivor Curve:	Iowa 55 L1			
	e Retirement Yea				
1977	30,209,175.34	44.97	671,691.72	24.74	16,615,980.14
1979	2,558,956.86	44.13	57,982.37	25.06	1,453,152.45
1980	843,650.07	43.69	19,307.74	25.24	487,240.45
1981	3,081,746.06	43.24	71,263.41	25.42	1,811,242.30
1983	13,510,285.43	42.31	319,339.54	25.80	8,238,688.71
1985	26,884.93	41.32	650.65	26.21	17,053.46
1986	3,872,901.61	40.81	94,906.13	26.43	2,508,043.93
1989	39,914.77	39.19	1,018.38	27.11	27,609.69
1990	12,359.18	38.63	319.93	27.35	8,750.70
1992	2,418,798.15	37.46	64,562.84	27.84	1,797,745.14
1993	1,684,915.89	36.86	45,709.62	28.10	1,284,264.20
1994	52,822.80	36.25	1,457.38	28.35	41,315.95
1995	26,487,757.87	35.62	743,712.33	28.60	21,272,262.67
1996	1,644,021.27	34.97	47,008.64	28.86	1,356,607.03
1997	1,579,298.44	34.32	46,021.54	29.11	1,339,869.88
2000	1,163,194.99	32.27	36,049.05	29.87	1,076,639.21
2002	21,721,768.01	30.83	704,494.36	30.35	21,380,747.96
Total	110,908,451.67	37.91	2,925,495.65	27.59	80,717,213.88
		BR	UNSWICK NUCLEAR	#2	
Interim S	Survivor Curve: .	Iowa 55 LI			
	Retirement Yea				
1975	33,889,946.81	44.97	753,532.54	23.46	17,680,943.61
1977	107,693.34	44.13	2,440.18	23.74	57,926.05
1978	2,013,403.17	43.69	46,078.67	23.88	1,100,487.72

Year	Original Z Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
1979	118,396.01	43.24	2,737.83	24.04	65,804.73
1980	195,049.57	42.78	4,559.17	24.19	110,306.54
1981	1,848,128.09	42.31	43,683.78	24.36	1,064,147.76
1983	912,444.09	41.32	22,082.38	24.71	545,702.35
1984	15,685,410.31	40.81	384,373.71	24.90	9,569,563.48
1985	41,261.91	40.28	1,024.31	25.09	25,699.55
1986	74,908.95	39.74	1,884.74	25.29	47,663.25
1987	140,294.74	39.19	3,579.47	25.49	91,255.58
1988	4,133,259.98	38.63	106,994.28	25.70	2,750,258.65
1989	2.51	38.05	0.07	25.92	1.71
1990	1.05	37.46	0.03	26.14	0.73
1991	0.43	36.86	0.01	26.36	0.31
1992	798,701.12	36.25	22,036.12	26.59	585,963.63
1993	24,286.30	35.62	681.90	26.82	18,289.23
1994	8,965,314.10	34.97	256,351.42	27.05	6,934,930.47
1995	1,635,456.72	34.32	47,658.02	27.28	1,300,272.87
1996	9,480,119.92	33.65	281,753.83	27.52	7,752,830.06
1997	852,792.39	32.96	25,870.68	27.75	717,865.12
2000	5,322,679.62	30.83	172,628.57	28.43	4,907,396.99
2001	8,836,534.21	30.10	293,612.71	28.65	8,411,041.05
Total	95,076,085.34	38.44	2,473,564.42	25.77	63,738,351.43
		Н	ARRIS NUCLEAR #1		
Interim S	Survivor Curve: Iowa	55 L1			
Probable	Retirement Year:	2046			
1987	205,609,935.30	44.97	4,571,673.63	31.63	144,606,709.47
1988	3,686,667.01	44.56	82,735.03	31.95	2,643,564.58
1989	2,959,526.24	44.13	67,058.71	32.28	2,164,593.82
1990	631,234.27	43.69	14,446.40	32.62	471,201.17

# Original Cost Of Utility Plant In Service And Development Of Composite Remaining Life as of December 31, 2002 Based Upon Broad Group/Remaining Life Procedure and Technique

Year	Original Cost	9	Avg. Annual Accrual		Future Annual Accruals (6)
(1)	(2)	(3)	(4)	(5)	
1991	1,058,301.43	43.24	24,472.55	32.96	806,671.50
1993	51,536.37	42.31	1,218.15	33.67	41,016.12
1997	2,068,168.20	40.28	51,341.33	35.14	1,803,988.36
1999	1,223,204.52	39.19	31,208.75	35.88	1,119,800.54
2001	11,831,964.67	38.05	310,925.54	36.62	11,385,672.26
2002	73,342.43	37.46	1,957.66	36.98	72,401.56
Total	229,193,880.44	44.44	5,157,037.76	32.02	165,115,619.40

#### **ROBINSON NUCLEAR #2**

	urvivor Curve: Iowa Retirement Year:	55 L1 2030			
1971	15,880,297.72	44.97	353,093.53	20.95	7,396,283.72
1972	1,099,320.00	44.56	24,670.60	21.04	519,144.03
1974	222,912.00	43.69	5,101.56	21.24	108,365.83
1975	6,790.47	43.24	157.03	21.35	3,351.95
1976	7,359.70	42.78	172.03	21.46	3,691.01
1977	3,217.57	42.31	76.05	21.57	1,640.45
1978	12,210.06	41.82	291.97	21.69	6,332.13
1979	10,748.95	41.32	260.14	21.81	5,674.36
1980	22,627.85	40.81	554.50	21.94	12,167.73
1981	5,841.60	40.28	145.02	22.08	3,201.97
1982	7,729,752.02	39.74	194,483.97	22.22	4,321,956.01
1983	146,458.14	39.19	3,736.72	22.37	83,593.57
1984	4,190,774.89	38.63	108,483.12	22.52	2,443,382.04
1985	332,834.44	38.05	8,746.37	22.68	198,393.46
1986	1,471,721.69	37.46	39,283.37	22.85	897,538.76
1987	18,853,073.86	36.86	511,459.91	23.02	11,772,448.38
1988	2,700,971.82	36.25	74,519.65	23.19	1,728,195.52
1989	1,889,296.17	35.62	53,046.88	23.37	1,239,543.15

# Original Cost Of Utility Plant In Service And Development Of Composite Remaining Life as of December 31, 2002 Based Upon Broad Group/Remaining Life Procedure and Technique

Year	Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
1992	751,013.47	33.65	22,320.49	23.92	533,880.87
1997	949,229.19	30.10	31,540.17	24.85	783,869.26
1998	1,976,489.93	29.35	67,353.33	25.04	1,686,224.02
1999	609,836.13	28.58	21,337.27	25.21	538,004.57
2000	12,001.40	27.80	431.66	25.39	10,958.80
2001	813,699.66	27.01	30,123.66	25.56	769,884.46
2002	15,466,341.17	26.21	590,143.27	25.72	15,179,251.95
Total	75,164,819.90	35.10	2,141,532.24	23.46	50,246,977.99
Account					
Total	510,343,237.35	40.19	12,697,630.08	28.34	359,818,162.69

Composite Average Remaining Life ... 28.34 Years

### Total Company 324.00 ACCESSORY ELECTRIC EQUIPMENT

Year	Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
		BR	UNSWICK NUCLEAR	t #1	
Interim	Survivor Curve:				
	le Retirement Yea				
1977	31,103,601.15	47.96	648,496.41	25.74	16,689,962.92
1978	176,243.40	47.49	3,710.89	25.98	96,412.13
1979	580,600.72	47.01	12,350.21	26.23	323,931.49
1980	804,921.33	46.52	17,304.25	26.48	458,204.86
1981	999,704.26	46.01	21,729.52	26.73	580,847.55
1983	93,944.84	44.95	2,090.12	27.24	56,928.98
1986	379.36	43.25	8.77	27.99	245.53
1987	39,834.18	42.66	933.78	28.24	26,373.83
1988	10,744,033.39	42.05	255,501.10	28.49	7,279,781.43
1989	415,531.65	41.43	10,030.15	28.74	288,224.94
1990	99,563.42	40.79	2,440.81	28.98	70,734.31
1991	5,441.08	40.14	135.55	29.22	3,960.97
1992	1,946,458.68	39.47	49,310.95	29.46	1,452,575.22
1993	418,976.40	38.79	10,800.50	29.69	320,664.30
1994	10,199,025.09	38.10	267,711.91	29.92	8,009,731.92
1995	2,666,822.42	37.39	71,329.58	30.14	2,150,026.28
1996	406,573.43	36.66	11,089.36	30.36	336,696.52
1997	70,664.32	35.93	1,966.98	30.58	60,142.29
2002	1,936,672.08	32.03	60,463.56	31.54	1,906,893.58
Total	62,708,991.20	43.33	1,447,404.38	27.71	40,112,339.06
		BRU	NSWICK NUCLEAR #	2	
Interim S	urvivor Curve: Id	owa 60 L1.5			
Probable	Retirement Year:	2034			
1975	40,565,478.92	47.96	845,772.40	24.25	20,510,580.21

## Progress Energy Carolinas, Inc Total Company

### 324.00 ACCESSORY ELECTRIC EQUIPMENT

Year	Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
1976	116,218.17	47.49	2,447.03	24.47	59,868.90
1979	457,853.71	46.01	9,951.89	25.14	250,151.92
1980	272,259.21	45.48	5,985.84	25.37	151,836.85
1981	33,799.04	44.95	751.97	25.60	19,247.72
1982	186,911.06	44.40	4,210.04	25.83	108,740.93
1983	67,078.18	43.83	1,530.36	26.06	39,879.45
1984	1,378,581.11	43.25	31,872.94	26.29	837,955.05
1985	74,194.15	42.66	1,739.24	26.52	46,124.97
1986	164,457.84	42.05	3,910.93	26.75	104,600.82
1987	14,112.56	41.43	340.65	26.97	9,188.09
1988	8,112,046.53	40.79	198,867.80	27.20	5,408,407.62
1989	211,568.54	40.14	5,270.84	27.42	144,500.60
1990	37,117.15	39.47	940.31	27.63	25,984.71
1992	1,164,666.56	38.10	30,571.07	28.06	857,854.45
. 1994	20,612,409.41	36.66	562,207.07	28.47	16,006,881.63
1995	1,006,479.82	35.93	28,015.91	28.67	803,181.30
1996	761,949.47	35.17	21,662.74	28.86	625,251.23
1997	420,952.86	34.41	12,234.33	29.05	355,421.80
2000	1,375,720.86	32.03	42,950.47	29.58	1,270,311.05
Total	77,033,855.15	42.53	1,811,233.84	26.30	47,635,969.31
		НА	ARRIS NUCLEAR #1		
Interim S	Survivor Curve: Iowa	60 L1.5			
Probable	Retirement Year:	2046			
1987	245,696,390.80	47.96	5,122,661.71	33.73	172,764,619.95
1988	2,379,983.16	47.49	50,111.67	34.09	1,708,438.89
1989	945,328.75	47.01	20,108.50	34.46	692,884.85
1990	1,163,036.31	46.52	25,003.02	34.83	870,735.37
1991	954,620.47	46.01	20,749.58	35.19	730,218.33

# Progress Energy Carolinas, Inc Total Company 324.00 ACCESSORY ELECTRIC EQUIPMENT

Year	Original A Cost	lvg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
1992	770,525.77	45.48	16,940.62	35.56	602,358.08
1993	299,817.90	44.95	6,670.45	35.92	239,597.07
1994	1,990,593.95	44.40	44,836.77	36.28	1,626,701.14
1995	1,711,516.45	43.83	39,047.57	36.64	1,430,563.16
1996	536,611.52	43.25	12,406.51	36.99	458,930.62
1997	62,069.00	42.66	1,455.01	37.34	54,330.82
1999	249,954.77	41.43	6,033.43	38.02	229,392.38
2001	1,939,212.24	40.14	48,311.89	38.67	1,868,228.59
2002	13,193.99	39.47	334.25	38.98	13,029.96
Total	258,712,855.08	47.78	5,414,670.98	33.85	183,290,029.22
		RO	BINSON NUCLEAR #	12	
Interim S	Survivor Curve: Iowa	60 L1.5			
Probable	Retirement Year:	2030			
1971	7,923,651.24	47.96	165,204.64	21.37	3,531,092.32
1072	420 660 00	47.40	0.005.04	24.52	104 004 47

Probabl	e Retirement Year:	2030			
1971	7,923,651.24	47.96	165,204.64	21.37	3,531,092.32
1972	428,668.00	47.49	9,025.81	21.53	194,361.17
1973	3,322.00	47.01	70.66	21.70	1,533.30
1974	186,023.00	46.52	3,999.13	21.87	87,451.53
1975	159,018.26	46.01	3,456.41	22.04	76,179.52
1977	75,341.94	44.95	1,676.23	22.40	37,543.69
1978	653,735.47	44.40	14,724.94	22.58	332,536.23
1979	1,187,117.49	43.83	27,083.61	22.77	616,704.79
1980	960,476.35	43.25	22,206.31	22.96	509,823.83
1981	310,226.50	42.66	7,272.27	23.15	168,324.58
1982	59,909.86	42.05	1,424.70	23.33	33,245.21
1983	40,125.16	41.43	968.55	23.52	22,780.46
1984	4,509,641.71	40.79	110,554.41	23.71	2,620,848.68
1985	758,498.23	40.14	18,896.58	23.89	451,436.95
1986	15,635,675.57	39.47	396,109.08	24.07	9,533,919.39

## Progress Energy Carolinas, Inc Total Company 324.00 ACCESSORY ELECTRIC EQUIPMENT

# Original Cost Of Utility Plant In Service And Development Of Composite Remaining Life as of December 31, 2002 Based Upon Broad Group/Remaining Life Procedure and Technique

Year	Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
1987	17,212,872.51	38.79	443,718.51	24.25	10,759,250.19
1988	902,925.58	38.10	23,700.69	24.42	578,860.88
1989	5,702,592.21	37.39	152,527.41	24.59	3,751,381.82
1990	124,129.31	36.66	3,385.65	24.77	83,845.85
1991	7,738,191.82	35.93	215,396.77	24.93	5,370,176.77
1992	3,213,345.42	35.17	91,357.59	25.09	2,292,531.66
1993	253,666.85	34.41	7,372.43	25.25	186,167.40
1994	2,665,843.54	33.63	79,273.92	25.41	2,014,079.53
1995	1,011,154.87	32.84	30,794.29	25.56	786,956.28
1996	214,447.52	32.03	6,695.12	25.70	172,071.72
1997	393,091.58	31.21	12,594.09	25.84	325,448.14
1998	182,919.17	30.38	6,020.61	25.98	156,391.07
1999	238,798.86	29.54	8,083.89	26.10	211,024.61
2000	45,500.50	28.69	1,586.12	26.23	41,599.90
2001	53,012.91	27.82	1,905.41	26.34	50,195.02
2002	51,701.57	26.95	1,918.59	26.45	50,754.36
Total	72,895,625.00	39.00	1,869,004.44	24.10	45,048,516.83
Account					
Total	471,351,326.43	44.71	10,542,313.64	29.98	316,086,854.43

Composite Average Remaining Life ... 29.98 Years

### Total Company 325.00 MISC. POWER PLANT EQUIPMENT

Year	Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
		BR	UNSWICK NUCLEAR	C#1	
Interim	Survivor Curve:	Iowa 45 R1			
Probable	e Retirement Yea	ır: 2036			
1971	189.20	43.43	4.36	21.62	94.21
1972	203.88	43.23	4.72	21.98	103.68
1973	235.07	43.01	5.46	22.34	122.06
1975	765.13	42.54	17.99	23.02	414.05
1977	2,832,325.93	41.99	67,449.64	23.67	1,596,580.04
1978	68,385.99	41.69	1,640.17	23.99	39,340.75
1979	92,824.26	41.38	2,243.22	24.29	54,492.10
1980	222,038.43	41.05	5,409.20	24.59	133,010.63
1981	779,440.42	40.70	19,151.17	24.88	476,460.48
1982	884,137.58	40.33	21,920.92	25.16	551,518.38
1983	1,441,671.66	39.95	36,087.51	25.43	917,779.01
1984	6,374,623.18	39.55	161,186.21	25.70	4,141,693.00
1985	11,815,957.84	39.13	301,969.23	25.95	7,835,846.28
1986	1,658,793.05	38.69	42,869.70	26.19	1,122,939.60
1987	7,366,860.04	38.24	192,644.24	26.43	5,091,778.26
1988	2,041,449.19	37.77	54,048.72	26.66	1,440,855.31
1989	241,192.10	37.28	6,469.17	26.88	173,872.91
1990	2,934,153.40	36.78	79,777.32	27.09	2,160,957.36
1991	1,265,651.96	36.26	34,906.24	27.29	952,569.12
1992	1,338,100.96	35.72	37,459.28	27.48	1,029,539.29
1993	882,438.02	35.17	25,091.98	27.67	694,326.00
1994	5,916,952.23	34.60	171,016.15	27.85	4,763,010.78
1995	2,412,882.66	34.01	70,938.49	28.02	1,988,024.58
1996	5,479,130.11	33.41	163,981.00	28.19	4,623,008.40
1997	716,435.84	32.80	21,844.23	28.35	619,367.33
1998	412,163.19	32.17	12,813.28	28.51	365,303.59

#### Total Company 325.00 MISC. POWER PLANT EQUIPMENT

Year	Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
1999	35,694.69	31.52	1,132.39	28.66	32,454.77
2000	5,815,273.59	30.86	188,426.98	28.81	5,427,914.83
2001	1,206,879.98	30.19	39,977.78	28.95	1,157,298.64
2002	330,235.86	29.50	11,193.80	29.09	325,581.94
Total	64,567,085.44	36.44	1,771,680.54	26.93	47,716,257.37
		BRU	INSWICK NUCLEAR	#2	
Interim	Survivor Curve: Id	owa 45 RI			
Probable	e Retirement Year:	2034			
1922	13.72	45.00	0.30	3.26	0.99
1946	47.97	45.00	1.07	11.41	12.16
1950	49.00	44.98	1.09	13.03	14.20
1968	16.46	43.61	0.38	20.03	7.56
1971	185.99	43.01	4.32	21.05	91.03
1975	2,787,650.09	41.99	66,385.72	22.32	1,481,415.43
1976	115,639.54	41.69	2,773.51	22.61	62,715.68
1977	153,699.15	41.38	3,714.34	22.90	85,065.51
1978	182,042.40	41.05	4,434.83	23.18	102,819.35
1979	185,055.43	40.70	4,546.89	23.46	106,663.26
1980	700,201.16	40.33	17,360.48	23.72	411,868.22
1981	196,343.13	39.95	4,914.80	23.98	117,867.95
1982	223,255.52	39.55	5,645.15	24.23	136,791.71
1983	213,068.91	39.13	5,445.20	24.47	133,264.22
1984	64,467.68	38.69	1,666.10	24.71	41,163.73
1985	321,768.30	38.24	8,414.28	24.93	209,778.32
1986	11,044,536.96	37.77	292,411.45	25.15	7,353,384.06
1987	315,400.44	37.28	8,459.56	25.36	214,498.71
1988	6,679,918.09	36.78	181,621.70	25.56	4,641,447.23
1989	512,753.74	36.26	14,141.57	25.75	364,107.21

### Total Company 325.00 MISC. POWER PLANT EQUIPMENT

Year	Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
1990	44,545.29	35.72	1,247.02	25.93	32,336.61
1991	14,196.43	35.17	403.67	26.11	10,538.92
1992	1,652.14	34.60	47.75	26.28	1,254.79
1993	11.07	34.01	0.33	26.44	8.61
1994	456,046.59	33.41	13,648.70	26.60	363,011.75
1995	1,063,342.46	32.80	32,421.47	26.75	867,189.82
1996	82,303.43	32.17	2,558.64	26.89	68,809.45
2001	762.92	28.80	26.49	27.55	729.74
Total	25,358,974.01	37.72	672,296.80	25.00	16,806,856.23
		BRUNSWICK	OFFSITE MEDIA CE	NTER #MC	
Interim .	Survivor Curve: Ion	va 45 R1			
Probable	Retirement Year:	2036			
1986	2,356.35	38.69	60.90	26.19	1,595.16
Total	2,356.35	38.69	60.90	26.19	1,595.16
		Н	ARRIS NUCLEAR #1		
Interim S	Survivor Curve: Iow	a 45 RI			
Probable	Retirement Year:	2046			
1980	293.56	43.61	6.73	27.69	186.40
1981	7,492.31	43.43	172.52	28.14	4,855.09
1982	12,703.99	43.23	293.87	28.58	8,399.83
1983	25,805.76	43.01	599.93	29.02	17,407.45
1984	793,424.65	42.78	18,545.25	29.44	545,927.96
1985	812.68	42.54	19.11	29.85	570.30
1986	12,743.72	42.27	301.47	30.25	9,119.86
1987	25,323,478.01	41.99	603,058.96	30.64	18,479,777.34
1988	5,009,698.06	41.69	120,152.89	31.02	3,727,646.03

### Progress Energy Carolinas, Inc Total Company

### 325.00 MISC. POWER PLANT EQUIPMENT

Year	Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
1989	3,115,829.39	41.38	75,298.06	31.39	2,363,921.68
1990	3,857,441.37	41.05	93,973.20	31.75	2,983,969.58
1991	3,505,793.39	40.70	86,138.76	32.10	2,765,226.16
1992	2,599,501.18	40.33	64,450.89	32.44	2,090,851.91
1993	548,899.76	39.95	13,739.90	32.77	450,248.21
1994	3,729,070.66	39.55	94,291.81	33.09	3,119,925.96
1995	4,681,505.58	39.13	119,640.80	33.40	3,995,652.46
1996	808,073.90	38.69	20,883.79	33.70	703,734.59
1997	2,975,649.82	38.24	77,813.59	33.99	2,644,797.96
1998	681,104.85	37.77	18,032.70	34.27	618,008.82
1999	2,864,535.67	37.28	76,831.55	34.55	2,654,217.22
2000	2,539,696.63	36.78	69,052.35	34.81	2,403,874.65
2001	1,560,840.77	36.26	43,047.45	35.07	1,509,758.39
2002	1,903,883.72	35.72	53,298.00	35.32	1,882,679.32
Total	66,558,279.43	40.35	1,649,643.59	32.12	52,980,757.14
		ROBINSON C	OFFSITE MEDIA CEN	TER #MC	
Interim S	urvivor Curve: Io	wa 45 R1			
Probable	Retirement Year:	2030			
1991	4,055.59	32.80	123.66	23.54	2,910.65
1992	0.38	32.17	0.01	23.66	0.28
Total	4,055.97	32.80	123.67	23.54	2,910.93
		ROBI	INSON NUCLEAR #2		
Interim Si	ırvivor Curve: Ion	va 45 R1			
Probable I	Retirement Year:	2030			
1971	1,788,547.99	41.99	42,592.88	19.64	836,734.13
1972	99,382.07	41.69	2,383.59	19.90	47,444.40

## Total Company 325.00 MISC. POWER PLANT EQUIPMENT

Year	Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
1974	48,660.00	41.05	1,185.43	20.41	24,188.98
1975	24,774.33	40.70	608.72	20.65	12,566,98
1976	39,282.86	40.33	973.96	20.88	20,334.46
1977	97,424.15	39.95	2,438.69	21.10	51,466.56
1978	272,626.77	39.55	6,893.53	21.32	146,998.00
1979	332,228.22	39.13	8,490.44	21.54	182,853.01
1980	170,640.58	38.69	4,410.02	21.74	95,880.55
1981	797,728.39	38.24	20,860.69	21.94	457,674.37
1982	1,065,286.97	37.77	28,204.18	22.13	624,171.41
1983	562,268.12	37.28	15,080.95	22.31	336,530.84
1984	1,419,142.95	36.78	38,585.38	22.49	867,853.08
1985	677,571.16	36.26	18,687.18	22.66	423,478.65
1986	811,234.19	35.72	22,709.98	22.82	518,335.22
1987	7,684,147.80	35.17	218,497.49	22.98	5,021,154.05
1988	1,595,002.82	34.60	46,099.96	23.13	1,066,268.99
1989	291,142.91	34.01	8,559.57	23.27	199,198.63
1990	2,307,388.44	33.41	69,056.19	23.41	1,616,482.62
1991	701,492.64	32.80	21,388.61	23.54	503,453.52
1992	1,543,716.04	32.17	47,990.88	23.66	1,135,632.94
1993	1,986,794.68	31.52	63,029.46	23.78	1,499,032.60
1994	5,191,329.00	30.86	168,209.87	23.90	4,019,832.09
1995	1,341,863.20	30.19	44,449.09	24.01	1,067,128.69
1996	1,444,976.66	29.50	48,979.48	24.11	1,181,110.42
1997	2,596,106.62	28.80	90,138.67	24.22	2,182,866.64
1998	1,405,147.96	28.09	50,026.94	24.32	1,216,435.36
1999	2,263,453.68	27.36	82,723.42	24.41	2,019,378.16
2000	1,465,658.65	26.62	55,051.93	24.50	1,348,983.12
2001	1,926,036.42	25.87	74,443.00	24.59	1,830,874.86
2002	2,564,024.50	25.11	102,110.28	24.68	2,520,279.95

### Total Company 325.00 MISC. POWER PLANT EQUIPMENT

# Original Cost Of Utility Plant In Service And Development Of Composite Remaining Life as of December 31, 2002 Based Upon Broad Group/Remaining Life Procedure and Technique

Year	Original Cost	Avg. Service Life	Avg. Annual Accrual	Avg. Remaining Life	Future Annual Accruals
(1)	(2)	(3)	(4)	(5)	(6)
Total	44,515,080.77	31.69	1,404,860.48	23.54	33,074,623.30
Account Total	201,005,831.97	36.56	5,498,665.98	27.39	150,583,000.14

Composite Average Remaining Life ... 27.39 Years